

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on April 14, 2008, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Michael J Sherry/

Supervisory Patent Examiner, Art Unit 2836

If appellant elects to continue prosecution, and a later appeal is filed, the fee paid for the notice of appeal and appeal brief will be applied to the later appeal. If, however, the appeal fees set forth in 37 CFR 41.20 increase before the later appeal, the applicant must pay the difference between the increased fees and the present fees already paid.

If the appellant elects to initiate a later appeal by filing a new notice of appeal, the appellant must file a complete new brief in compliance with 37 CFR 41.37 within two months from the filing of the new notice of appeal. See MPEP §1207.04.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 7, 10, 13, 14, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US patent of Carcia (3,740,569) in view of the US patent of Wang (6,064,262).

As to claim 7, Carcia discloses a communication system, comprising: a plurality of communications circuit modules (coupled to terminals 11-14) each operable at one or more of a plurality of voltages, the modules being compliant with maximum permissible voltage levels (+10V,+5V,-6V) defined for normal operation of the modules; and a plurality of power supply components (26-28) for simultaneously supplying the circuit

modules (11-14) with multiple voltage levels (+10V,+5V,-6V) (see column 2, lines 8-26 and 47-64; and Figure 1). Carcia does not disclose the claimed regulating circuit.

Wang discloses a regulating circuit (100) connected to control output of a first power supply component (V1) and a second power supply component (V2) with respect to a maximum permissible voltage level (dc offset) during operation of the system, the regulating circuit configured to control (via the backgate terminal of Q1) the voltage output from the first power supply component (V1) so that deviation exceeding the maximum permissible voltage level (dc offset) is reduced or prevented (see column 1, lines 33-38; column 2, lines 17-23; column 3, lines 11-27; and Figure 2). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the technique of Wang to regulate the power supply components of Carcia with respect to a maximum permissible voltage level during operation, in order to protect the communications circuit modules against excessive voltage.

As to claim 10, Wang does not specify a maximum voltage value for the maximum permissible voltage differential; however, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have selected a specific number as the maximum voltage value because selections of values of components and operational levels for an electronic device are engineering decisions based upon the system's intended use and the expected requirements of the other systems with which it will interface. See MPEP §2144.04(IV)(A). In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art

and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

As to claims 14 and 23, the technique of Wang can be used to regulate each of the power supply components of Carcia, including the power supply component with the maximum voltage (26).

As to claim 22, the regulating circuit of Wang (100) is connected between the outputs of two power supply components (V1,V2), and the voltage output of the power supply components is adjusted (via the backgate terminals of transistors Q1 and Q2) (see column 1, lines 33-38; column 2, lines 17-23; column 3, lines 11-27; and Figure 2).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Wang as applied to claim 7 above, and further in view of the US patent of Shima (7,085,584).

As to claim 8, Carcia in view of Wang disclose all of the claimed features, as set forth above, except for a USB, V.24, or Ethernet interface. Shima discloses a communication system (portable telephone) with a USB interface (see column 9, lines 50-60 and Figure 14). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a USB interface with the system of Carcia in view of Wang, in order to enable compatibility with a wide range of computer systems.

6. Claims 15, 16, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Wang, and further in view of the US patent of Latu et al. (6,757,386).

As to claim 15, Carcia in view of Wang disclose all of the claimed features, as set forth above, except for at least one communications circuit module compliant with the Safety Extra Low Voltage (SELV) standard. The regulating circuit (100) of Wang is connected between outputs of two power supply components (V1,V2) (see Figure 6). Latu discloses a communications circuit module (low power standby circuitry connected to circuit board portion 38) compliant with a maximum permissible voltage differential according to the SELV standard as defined in the IEC 60950 standard of the International Electrical Commission (IEC) (see column 3, lines 25-48 and column 5, lines 26-52). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Carcia in view of Wang to comply with the SELV standard, in order to provide standards-compliant hardware.

As to claim 16, the circuit modules of Latu include communications interfaces (see column 4, lines 35-40 and column 5, lines 26-52). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the power supply circuit of Wang to supply power to a communication system such as the system of Latu, because the circuit of Wang is relatively inexpensive and easy to produce.

As to claim 18, the power supply circuit of Carcia includes a plurality of dc to dc converters (26-28) (see column 2, lines 47-64).

As to claim 21, Latu discloses a system module (low power standby circuitry) (see column 3, lines 25-48).

7. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Wang and Latu as applied to claim 15 above, and further in view of the US patent of Awata et al. (6,263,015).

As to claim 17, Carcia in view of Wang and Latu disclose all of the claimed features, as set forth above, except for the claimed analog subscriber line interface. Awata discloses an analog subscriber line interface (see column 4, lines 7-13 and column 6, lines 12-14). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the power supply circuit of Carcia in view of Wang and Latu to supply power to a communication system such as the system of Awata, in order to prevent damage to the communications circuit modules due to an overvoltage condition.

As to claim 20, Awata discloses a subscriber module (23) (see column 7, lines 25-27 and Figure 6).

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carcia in view of Wang and Latu as applied to claim 16 above, and further in view of the US patent of Shima (7,085,584).

As to claim 19, Carcia in view of Wang and Latu disclose all of the claimed features, as set forth above, except for a USB interface. Shima discloses a communication system (portable telephone) with a USB interface (see column 9, lines 50-60 and Figure 14). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a USB interface with the system of Carcia in view

of Wang and Latu, in order to enable compatibility with a wide range of computer systems.

### ***Response to Arguments***

9. Applicant's arguments, see Appeal Brief, filed April 14, 2008, with respect to the rejection(s) of claim(s) 7, 8, 10, and 13-23 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Wang.

As to claims 17 and 20, the applicant states that mere identification of an analog subscriber line or module in the prior art does not render the invention obvious. The Examiner respectfully disagrees. Claims 17 and 20 merely recite the use of well-known interfaces or modules in the claimed system, and the mere addition of well-known elements does not patentably distinguish the claimed invention from the prior art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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